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EXAMINER

RIMELL, SAMUEL G

ART UNIT PAPER NUMBER

2175

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,227

Applicant(s)

TANAKA, MASAHIRO

Examiner

Sam Rimell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.


SAM RIMELL
PRIMARY EXAMINER

Preliminary Note: This office action includes new grounds of rejection based on prior art not previously of record. Accordingly, this office action is made non-final.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-16, 18, 22-24 and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Takada (U.S. Patent 5,146,604).

Claim 1: FIG. 1 illustrates a system in which a memory structure (2b) stores information. The information is digital image data (col. 2, lines 26-33).

FIGS. 9-10 illustrate a recoding mechanism which records a history use (number of searches and search day). FIG. 10 is the recording mechanism for memory structure (2b) while FIG. 9 has the same recording mechanism for another memory structure (2a).

The controller is the controller structure (6) in Fig. 1. This controller controls the number of digital images that may be provided in the memory unit (2b). If the search frequency goes down for images in memory (2b) they are erased from memory (2b).. If the search frequency goes up for images in memory (2a) they are transferred to memory 2b (See col. 5, lines 25-48). Thus the number of images in memory (2b) are controlled by the controller, so that the number of popular images is controlled so as to be greater and the number of non-popular images is controlled so as to be a lesser number or zero.

Claim 2: The condition is the number of images in memory (2b) and this is directly controlled by the controller (6).

Claim 3: The recorders (FIGS. 9-10) record the number of “orders”, which is readable as the number of searches for a particular image.

Claim 4: The movement of popular images to the memory (2b) and erasure of unpopular images in memory (2b) is performed when the recorded lists are compared. The period of time between these comparisons is the predetermined period.

Claim 5: Images that are more popular are either retained or moved to the memory (2b). Accordingly, memory (2b) allows a greater number of the popular images to be stored in its memory space.

Claim 6: If the number of searches (orders) for an image increases, the images may be transferred into the memory space (2b). In this case, the number of those particular images in memory space (2b) increases (col. 5, lines 25-48).

Claim 7: If the number of searches (orders) for an image decreases, the images may be deleted from memory space (2b). In this case, the number of those particular images decreases (col. 5, lines 25-48).

Claim 8: The searcher is the programming of the controller which causes the recorded information in FIGS 9-10 to be compared for changes in search frequency.

Claim 9: The “given condition” is a change in the frequency of searches for an image. The frequency of searches directly correlates to a number of orders for a search, since actual search on a document is considered an order for that document.

Claims 10-11: The “given condition” is a change in the frequency of searches for that given image. The given condition may apply to a popular document or unpopular (unappreciated) document.

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Claim 12: The “given condition” is enforced on the images, which are inherently provided by some provider source.

Claim 13: See remarks for claim 10.

Claim 14: An image whose frequency of search reduces is erased from memory (2b) and may be replaced by a “fresh image” whose popularity has increased and is transferred into memory (2b).

Claim 15: The printed matter printed matter production system is the overall system of FIG. 1 since this system is capable of storing and printing images (col. 2, lines 15-47).

Claim 16: In FIG. 1, the print unit (4) is the acceptor since it accepts data that is designated to be printed.

Claim 18: The proposer is the display unit (3, FIG. 1). The acceptor is the printer (4, FIG. 1). The controller (6, FIG. 1) is the decider that sends print commands for images to be printed.

Claim 22: See remarks for claim 1. The step of informing is displaying images on the display screen (3) while the step of accepting orders is the step of performing a search on an image, which is recorded by the recording tables of FIGS. 9-10.

Claim 23: See remarks for claim 2-3.

Claim 24: The memory is system (2b). The recorder is the tables of FIGS. 9-10. The searcher is the controller (6) which compares the tables of FIGS. 9-10 to look for changes in search frequency for given images.

Claim 41-42: See remarks for claim 1.

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Claim 43: Claim 43 is directed entirely to a method step with the context of claims directed to physical memory hardware. Accordingly, such a method step carries no patentable weight since it does not further limit the memory hardware.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 19, 20, 21, 29 and 44 rejected under 35 U.S.C. 103(a) as being unpatentable over Takada (U.S. Patent 5,146,604) in view of Nishikawa (U.S. Patent 6,421,141).

Claims 17, 19, 20, 21, 29, 44: Each of the claims in this group differ from Takada in that they do not disclose multiple printers or a printer selector. However, Nishikawa provides for an algorithm which permits the selection of one printer from a group of individual printers, based on desired color reproduction capabilities. (col. 10, lines 39-47 of Nishikawa). It would have been obvious to one of ordinary skill in the art to modify the system of Takada to include multiple printers and a printer selector so as to enhance available options for color reproduction of images as taught by Nishikawa.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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Claims 24-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohsawa et al. (U.S. Patent 6,509,900).

Claim 24: Ohsawa et al. discloses a memory device (HDD device) that stores a plurality of digital images. The entities which provide the images are inherently image providers. The system includes an image server (102) that performs the programmed functions illustrated in FIGS. 2-3. At step S205 a block of programming acts as a recorder and records the popularity of a given image which has been requested for retrieval. At steps S300-S306 in FIG. 3, a block of programming acts as a controller to control a condition. One such condition is the amount of memory space available on the high speed HDD retrieval device. The users (100, 101) are the searchers that search for image data.

Claim 25: The condition is the amount of available memory space on the HDD. This condition is changed based upon the popularity of images, which correlates to the number of orders for those images. For example, less popular images can be erased, thus changing the available space condition.

Claim 26: The given condition is the available space on the HDD. This space is controlled by a relationship between popular images and unpopular images. The most popular images are supposed to be located on the HDD, and the CD-ROM changer is supposed to contain a copy of all the images, so how the search is fulfilled depends upon how popular an image actually is. More popular images are found on the HDD and less popular images are found on the CD-ROM changer.

Claim 27: The first condition of available memory space on the HDD is imposed on image providers, since image providers cannot provide more images that physical space permits.

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Claim 28: See remarks for claim 26.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsawa et al. (U.S. Patent 6,509,900) in view of Nishikawa (U.S. Patent 6,421,141).

Claim 29: Ohsawa et al. discloses a memory (HDD device) that stores a plurality of digital images. At step S205, a block of programming acts as a recorder and records the popularity of a given image which has been requested for retrieval. Ohsawa et al. differs in that it does not include specifications for printers used by the users (100, 101). However, Nishikawa discloses a digital image processing and printing system such that could be used by users (100, 101) of Ohsawa et al. FIG. 13, parts 618-620 of Nishikawa provides for an algorithm which permits the selection of an individual printer, based on the desired color reproduction capabilities (col 10, lines 39-47 of Nishikawa). It would have been obvious to one of ordinary skill in the art to modify each of the user stations (100, 101) to include multiple printers and capabilities for selecting a desired printer so as to enhance the available options for color reproduction as taught by Nishikawa.

Claim 30: The system of Nishikawa can select from one of several printers having differing printing capabilities.

Claim 31: See remarks for claim 18. In addition, the storing is accomplished by the CD-ROM changer of Ohsawa et al. and the deciding is accomplished by the printer selection algorithm of Nishikawa.

Claim 32: Permitting users (100, 101) in Ohsawa et al. access to the images is the step of informing users of proposals. Having one of the users make a selection of an available image is the step of hearing a response from the user.

Claim 33: A plurality of images can be proposed to the users of Ohsawa et al., and any number of selections of desired images can be made.

Claim 34-35: Ohsawa et al. stores digital images in the CD-ROM changer and HDD system. Displaying to the users (100, 101) the images which are available is the step of proposing optional digital image data. Having the users select images for downloading is the step of accepting selections. Having the users use an algorithm from Nishikawa to select the printers for printing is the step of producing the printed matter. It would have been obvious to one of ordinary skill in the art to modify Ohsawa et al. to have the users (100, 202) to include multiple printers and a printer selection algorithm for the reasons previously cited herein.

Claim 35: See remarks for claim 34. Further note that the system at the user location in Ohsawa et al. can change the selection of printer using the algorithm of Nishikawa.

Claim 36: The container is the system Ohsawa et al. which includes the printers and printer selector of Nishikawa. It would have been obvious to one of ordinary skill in the art to modify Ohsawa et al. to include the printers and printer selector of Nishikawa for the reasons previously recited herein. In addition, binding the printed digital images, such as by a photo

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album or book is very well known in the art and would have been obvious to one of ordinary skill in the art as technique for storing and protecting the digital images.

Claim 37: The system of Ohsawa et al. stores digital images. The digital images are proposed to users (100, 101) and selections of digital images are made by those users. Nishikawa et al. discloses a set of printers and printer selector for printing the digital images at the user site. It would have been obvious to one of ordinary skill in the art to modify Ohsawa et al. to include the printers and printer selector of Nishikawa for the reasons already recited herein.

Claim 38: See remarks for claim 33.

Claim 39: See remarks for claim 37.

Claim 40: See remarks for claim 37. Further note that selection changes can be made in the sense that printer selections can be changed.

Remarks

Applicant's arguments are moot in light of the new grounds of rejection applied with respect to claims 1-24 and 41-44. Claims 24-40 have not been substantively amended, and thus the previous grounds of rejection remain applied to these claims for the reasons provided with each of claims 24-40.

This office action is made non-final.

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Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (703) 306-5626.

A handwritten signature in black ink, appearing to read 'Sam Rimell', is positioned above the printed name.

Sam Rimell
Primary Examiner
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